

ABSTRACTGENERATING TEXTURE MAPS FOR
USE IN 3D COMPUTER GRAPHICS

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A texture map for texturing the polygon mesh of a 3D computer model during rendering is generated by defining a respective triangle within the texture map for each triangle in the polygon mesh to create a texture coordinate map, and allocating image data to each defined triangle. To generate the texture coordinate map, the triangles are defined so that the area of each triangle is dependent upon the content of texture data to be stored therein. More particularly, triangles required to store texture data with a relatively large amount of detail have a relatively large area and triangles which are required to store texture data with relatively little detail have a relatively small area. In this way, more area is allocated for the storage of detailed texture data, thereby reducing the amount of information which is lost from the texture data during the creation of a texture map.